

Butterfly Collecting in Afghanistan

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Introduction

In July 1977 I had the good fortune to go on a business trip to Afghanistan, in the course of which I was also able to collect more than sixty species of butterflies. On my return to London, I delved into the relevant literature in order to identify the species and found that not only was it remarkably sparse, but that apparently no general account has been published in an English journal this century. Furthermore, my material complements earlier published records to the extent where it seemed worthwhile presenting it in a separate paper. It should also serve to illustrate the richness of the Afghan fauna and the extent to which good collecting results are possible, even with a very limited amount of time available. It will be noted that the bulk of the material is clearly of Palaearctic origin, particularly from the Iranian and Turkestan faunae. I did not have the chance to visit the Nangrahar area where there is a strong representation of the Oriental fauna.

As the systematic part of the paper will show, there are significant differences in the subspecific nomenclature employed in the major recent works cited (Forster 1937, Heydemann 1954, Clench & Schoumatoff 1954, Wyatt 1961, Wyatt & Omoto 1966 and Howarth & Povolny 1973, 1976). Final stabilisation of the nomenclature will doubtless take some time, and my use of a name does not necessarily imply that I am "taking sides", unless this is clear from the text. Although there will be cases where several good subspecies of a given species exist in Afghanistan, some will almost certainly need to be relegated to synonymy. In particular it appears that the effects of an extreme, diverse and erratic climate has not always been taken adequately into account.

The localities exploited are given in the following list, which includes the abbreviation used for localities in the systematic list.

Kabul, Intercontinental Hotel, 1,800 m., 5.vii.1977 (KAB). On a dry and rather impoverished stony steppe hillside for two hours; several species mainly on water-mint along a watering canal. 17 species.

Hindu Kush, Salang Pass, 3,200 m., 9.vii.1977 (HS). In an open, typical subalpine landscape with pillows of *Astragalus* and *Acantholimon*. Half an hour was available with 15 species caught. Butterflies were far from plentiful.

Hindu Kush, Salang Pass, 2,600 m., 9/11.vii.1977 (LS). In a north facing valley with some trees and a fairly lush vegetation along a stream. One and a half hours was available, on two occasions, in what proved to be a rich collecting ground.

Doshi, 1,500 m., 9.vii.1977 (D). Along a river bed snaking through emerald green rice fields in what otherwise was virtually subdesert, though traces of a rich spring flora could be seen. 10 species were seen in half an hour.

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Mazar-i-Sharif, 1,000 m., 10.vii.1977 (MIS). One hour of collecting in gardens inside the town yielded 12 species.

Qunduz, 1,000 m., 11.vii.1977 (Q). Half an hour's collecting in a very poor hotel garden, only 6 species.

Paghman Mts., 2,200-3,000 m., 15.vii.1977 (PG). An excellent and well known collecting area, stretching from the town of Paghman to the top of the mountains along a river valley with diverse vegetation and some irrigated agriculture. 34 species were noted in six hours.

Afghanistan is a lovely and most productive place in which to collect and its hospitality and friendliness is evident even during a short stay. In one or two places, such as Bamian, Paghman, and on the Salang Pass, hotel accommodation is available within easy striking distance of good collecting grounds. Unfortunately, it is not possible at present to hire a self-drive car which would assist collecting considerably.

I would like to thank Mr. and Mrs. K. Tarzi and Mr. and Mrs. A. Ramsay for their kind assistance, as well as Mrs. A. Yousefi and Ms. E. Bazalgette for the cheerful way in which they accepted my total disregard for what would otherwise have been excellent picnics at Doshi and on the Salang Pass. I am indebted to Mr. S. Sakai, Dr. L. G. Higgins and the British Museum (Natural History) for their assistance in the determination of the material.

Systematic list

Pieris brassicae ottonis Röber. KAB, LS, PG. This is a common and widespread butterfly in Afghanistan, not least near human habitation. The subspecific name *nepalensis* is sometimes applied also to Afghan material.

Artogeia rapae tochica Peile. KAB, LS, MIS, Q, PG. My series shows considerable variation which is hardly surprising given the diverse ecological conditions under which they were found. I follow Howarth in using the name *tochica*; others have used *leucosoma* Schawerda. Correct attribution of subspecies in an ecologically and generationally variable species such as *rapae* is not easy, especially as it is known to migrate in the area.

Artogeia canidia indica Evans. LS, PG. A small series of this fine subspecies was caught on rocky ground. It appeared to be less tied to agricultural land than *rapae*.

Pontia daplidice daplidice Linné. A very common species. Wyatt & Omoto use the subspecific name *nubicola* Röber; Howarth uses *moorei* Röber; some older authors use *persica* Bienert. Considering that *daplidice* is a strong migrant, able to travel for thousands of kilometres, and that the migration pattern is essentially nomadic (Larsen 1976), it is difficult to accept defined subspecies in the west Palaearctic.

Pontia glauconome iranica Bienert. D. A few were taken in this tinder-dry locality. They are probably referable to *iranica*; Howarth reports ssp. *vipasa* from the Nangrahar area which is in the Oriental zone.

Colias fieldii Ménetries. P.G. Although this is considered to be a common and widespread species, I met with it only in Paghman. The series is somewhat variable, and I initially believed two species to be involved.

Colias erate afghana Bang Haas. Everywhere. At the time of my visit this was by far the most common butterfly throughout the country. Clench & Schoumatoff use the name *undina* Gr.-Grsh.; Howarth unaccountably uses the name *marnoana* Rogenhofer, which refers to the morphologically very distinct form living in the Sudan and South Arabia.

Colias alpherakyi roschana Gr.-Grsh. HS. A couple of this striking butterfly were caught at the very high point of the Salang Pass, where it was both uncommon and uncommonly difficult to catch as it cruised on bare hillsides. I missed catching a specimen of what was probably the same species at Paghman; this would have been referable to ssp. *kohibaba* Wyatt & Omoto.

Danaus chrysippus chrysippus Linné. Near Charikar. A single specimen was observed from the car near the foot of the Hindu Kush. The species has no chance of surviving winter in these parts, and it appears to migrate into Central Afghanistan every summer. It is probably resident in the Nangrahar region.

Vanessa cardui cardui Linné. Everywhere. Local migration of this butterfly has been noted from Afghanistan.

Aglais cashmiriensis cashmiriensis Kollar. PG. At Paghman I only found the species near watering canals bordered with nettles. Specimens observed at 3,200 m. on the Salang Pass are likely to have been *A. rizana*.

Nymphalis xanthomelas fervescens Staudinger. LS, PG. Wyatt & Omoto described ssp. *hazara*; especially in view of the fact that *xanthomelas* is known as a migrant, I tend to agree with Howarth when he sinks *hazara* as a synonym of *fervescens*.

Polygonia egea undina Gr.-Grsh. LS. A single specimen seen near a village.

Issoria lathonia lathonia Linné. HS, LS, PG. Judging from my experience this is the most common of the Argynninae in the country. I saw scores of it without meeting any other species. The subspecific name *saturata* Röber is often used for Afghan specimens; I have previously stated my view that it is impossible to define subspecies of this butterfly west of the Himalayas (Larsen 1974).

Melitaea didyma nadezhdae Sheljuzhko. LS. A small series of rather unexceptional *didyma* is probably best referred to this subspecies. My two females are very different from each other.

Melitaea avinovi Sheljuzhko. HS. I caught a single male of this fairly common Afghan endemic.

Karanasa pamira ssp. HS. The single male is so poor that subspecific attribution is not possible. The most likely candidate is *twomeyi* Wyatt.

Karanasa bolorica hodja Avinoff & Sweadner. HS. Sakai kindly studied photographs of the single specimen to arrive at the exact determination.

Aulocera swaha parthicola Clench & Schoumatoff. PG. Very common all the way from Paghman town to 2,800 m. My series all have more narrow white bands than the specimen from Paghman figured by Wyatt & Omoto.

Hipparchia parisatis Kollar. KAB, D. On dry, stony ground where the butterflies liked to settle in the shade of rocks or trees. I follow Kudrna (1977) in not allocating subspecific names to the erratic clinal variation in the species.

Satyrus pimpla ziara Talbot. KAB. I was surprised to take a small series of this interesting butterfly next to the Kabul Intercontinental Hotel in a lunch break.

Chazara briseis fergana Staudinger. LS. A single female with wide white bands and a light underside. I follow Sakai (pers. comm.) in using the name *fergana* for Afghan material; other authors have tentatively advocated *maracandica* Staudinger.

Chazara enervata Staudinger. KAB, LS. This taxon was considered specifically distinct from *persephone* Hübner (= *anthe* Hoffmannsegg) by Clench & Schoumatoff. It appears to be common and widespread on dry ground.

Pseudochazara telephassa Hübner. PG. I caught only one specimen. Elsewhere it occasionally occurs in masses.

Pseudochazara baldiva porphyritica Clench & Schoumatoff. PG. A single female was taken with *telephassa* at about 2,600 m.

Hyponephele davendra latistigma Moore. PG. I caught three different species of this difficult complex flying sympatrically at Paghman. One male clearly belongs to the above taxon. After consultations with Sakai, I have decided to consider Howarth's subspecies *kondoi* synonymous with *latistigma*. The genitalia of the three species are shown in figure 1.

Hyponephele tenuistigma Moore. PG. A single male of this species was also caught. It is readily distinguished from the two others both in habitus and in the genitalia.

Hyponephele sp. PG. Four males and three females of this species were caught and originally assigned to *H. ? davendra evanescens* Wyatt & Omoto, since the androconial band is vestigial. Sakai kindly informed me this could not be so and that judging from the photos it was closer to *tenuistigma*. However, as the genitalia clearly differ, it is a distinct species.

Hyponephele mussitans mussitans Clench & Schoumatoff. PG. This little species was quite common at about 3,000 m., but I did not see it on the lower part of the mountain.

Hyponephele interposita Erschoff. KAB. Females were common on water-mint, together with both sexes of *H. lupinus*.

Hyponephele lupinus centralis Riley. KAB, MIS. I range my series as ssp. *centralis*, which Howarth also did for specimens from Kabul. Wyatt & Omoto used the name *turanica* Rühl. Howarth described a separate ssp. *herata* from Herat. There are almost certainly not three good subspecies of this widespread butterfly in Afghanistan, but a final decision must await the study of a comprehensive material from all parts of the country.

Pararge eversmanni shiva Wyatt. LS. A pair was beaten out of low trees. They are even more lightly marked than Wyatt's

types. Howarth records the much darker ssp. *cashmiriensis* Moore from Nuristan, which makes good zoogeographical sense.

Lasiommata menava Moore. LS. A single female was caught along with the previous species. Heydemann's linkage of this species with the Yemeni *L. felix* Warnecke was effectively dealt with by Wiltshire (1956).

Coenonympha mangeri Bang Haas. PG. Fairly common on wet meadows, but well past its peak.

Chaetoprocta odata Hewitson. PG. Incredibly common inside the old royal summer capital of Paghman. Every walnut tree, the dominant tree in Paghman and foodplant of the species, housed thousands of butterflies. A couple of walnuts thrown into a tree crown would provoke a veritable explosion of butterflies. In the late afternoon sunshine, dancing strings of 40-50 specimens would dash round the trees. I have never seen so many individuals of a species of Rhopalocera in one spot. I have not seen records of this species in print from Afghanistan before; it may recently have colonised the locality.

Strymon sassanides Kollar. PG. Common on a *Sorbus*-like flower.

Lycaena phlaeas stygianus Butler. KAB, LS, MIS, PG. As in many hotter parts of the world, *phlaeas* is widespread but not very numerous.

Lycaena thersamon kurdistanica Riley. D, MIS, PG. A few were caught in very different terrain; *thersamon* appears to be quite catholic in its ecological choice within its area of distribution.

Lycaena caspius evansi de Nicéville. LS, PG. My series appear to be typical *evansi* which Forster also reports from Badachshan. The uppersides are dark and there is no orange lunule in the anal area of the hindwing. Howarth described *L. caspius afghana* from Paghman, but from the description and the photos, I wonder whether this is not a form of *L. sarthus*, which I caught sympatrically with *caspius evansi* at Paghman. The complex is a difficult one, but I definitely have two distinct sympatric species.

Lycaena sarthus Staudinger. PG. The species is smaller than *evansi* and has an orange spot on the upperside of the anal angle of the hindwing, which is prominently tailed.

Apharitis acamas hypargyros Butler. KAB, D. In these two very dry localities I saw more *acamas* than I have ever seen in one spot before. The females, of which I caught most, are very variable in size and markings.

Lampides boeticus Linné. Everywhere. It would seem that 1977 was a good year for *boeticus* in Afghanistan.

Tarucus balkanicus Freyer. MIS. In principle the Afghan specimens should be referable to ssp. *areshana* Evans; in fact the series is comprised of small, clear blue and quite typical specimens, some of which even lack any traces of black discal spots. I do not believe *areshana* deserves subspecific status.

Chilades galba Lederer. MIS, Q. Until Howarth and Povolny recorded this species from Herat, there were no Afghan

records. The present series represents a considerable extension of its known range. The series was associated with *Prosopis* under ecological conditions exactly matching those in the Middle East.

Freyeria trochylus trochylus Freyer. D. Heydemann described var. *obscura* on the basis of Afghan material. My series does not suggest that Afghan *trochylus* differ consistently from the nominate subspecies. Howarth records the Oriental ssp. *putli* from Nangrahar, but treats it as a distinct species.

Turanana cytis laspura Evans. HS. A single male was caught in the same area as *Colias alpherakyi roschana*.

Philotes vicrama ssp. LS, MIS, PG. I caught one female in each locality. The Paghman specimen is like a very silvery specimen of ssp. *astabene* Hemming, to which Howarth refers Afghan material. The two others are dark and closer to Asian than to Middle Eastern material.

Plebejus eurypilus iranica Forster. HS. A single male was caught. I can find no record of this species in print from Afghanistan, but Sakai (pers. comm.) has taken it in several localities as well.

Polyommatus candalus nuksani Forster. LS. A few males were taken along with larger numbers of *P. eros bilucha*.

Polyommatus eros bilucha Moore. LS, PG. This is by all accounts a common and widespread butterfly in Afghanistan.

Polyommatus sp. LS. I caught two males which I cannot place. They are the size of *icarus*, but otherwise match *candalus*.

Polyommatus icarus fugivitta Butler. Everywhere. This is the subspecies to which Afghan material is usually referred. However, at Mazar-i-Sharif and elsewhere I caught specimens whose underside is almost unmarked white and which could be referred to ssp. *persica* Bienert.

Polyommatus bogra Evans. KAB. As I caught it next to the Intercontinental Hotel, it is surprising that the first records of the species were those of Howarth & Povolny. On the wing it both looks and behaves like *A. loewii*.

? *Vacciniina iris ashretha* Evans. HS, LS, PG. I found this butterfly abundant, though other authors have considered it scarce. Higgins (pers. comm.) is unhappy about its placement in *Vacciniina*.

Erynnis marloyi pathan Evans. KAB. A series from the vegetable garden of the Intercontinental Hotel. It must be very localised since the only other Afghan record is that of two males caught by Povolny at Nangrahar in 1967.

Carcharodus alceae insolatrix le Cerf. KAB, LS, D, Q, PG. A common species. Evans records ssp. *gooraisa* Evans from the Paghman Mts. Other authors have used the name *swinhoei* Watson, which rightly refers to specimens from Baluchistan. Two of my three specimens from Paghman do match *gooraisa*; the third and a series from Kabul, 25 km. to the east, are *insolatrix*. Heydemann's attempt to link the Afghan *alceae* with the Yemeni *wissmanni* Warnecke is not promising. The species is so variable that subspecific attribution is not easy.

Carcharodus dravira Moore. LS, PG. A few specimens only were caught. This taxon is best considered specifically distinct until its relationship with *C. orientalis* Reverdin has been fully investigated.

Spialia geron geron Watson. KAB (Ramsay leg.). The species has previously been recorded from Kabul.

Spialia orbifer carnea Reverdin. LS, PG. The Paghman specimens are typical *carnea*, a large subspecies with almost incredible brick red undersides. Specimens from the Hindu Kush seem intermediate to ssp. *lugens* Staudinger. For a discussion of the relationship between the two, see de Jong (1974).

Syrichtus poggei lutentulus Gr.-Grsh. LS. A large, well marked subspecies, with remarkably rounded forewings. Nothing resembling ssp. *patta* Evans, also from Afghanistan, was met with.

Syrichtus musta musta Evans. LS, PG. Clench & Schoumatoff separated this taxon from *staudingeri*, under which Evans (1949) ranged it as a subspecies. My single specimen from Paghman is typical *musta*, while the one from the Salang Pass is transitional to ssp. *loga* which is found in the southern mountains of Afghanistan.

Syrichtus staudingeri plurimacula Christoph. HS. I took a single male of this species in a spot about 500 m. higher up the pass from the locality where I found *musta*; it has not previously been caught in Afghanistan. The genitalia differ from those of *musta* and *loga* in missing the spined processes flanking the aedaeagus sheath. This interesting discovery substantiates the decision of Clench & Schoumatoff to separate *staudingeri* and *musta* at the specific level.

Pyrgus badachschanus Alberti. PG. I was lucky to take a specimen of this interesting Afghan endemic at about 3,000 m. According to Sakai it is a new record for the Paghman range.

Thymelicus lineola lineola Ochseneimer. LS, PG. The small series from the Paghman Mts. are typical. A single male from the Salang Pass has the upper hindwing slightly overlaid with black scales and has a prominent end cell bar; this may indicate a clinal relationship to ssp. *kushana* Wyatt, which has completely black hindwings.

Thymelicus alaica Filipjev. LS. A series of seven males and one female match the single male which was at Evans' disposal, and which he ranged as a subspecies of *hamza*. The genitalia, however, are closer to those of *flava* (see Higgins 1975), though their general aspect is rather more elongated. As *flava* is entirely missing between Syria and Afghanistan, it seems more reasonable to consider *alaica* specifically distinct. The species must be very local as there are no other records of *hamza/flava* from Afghanistan. In three of the specimens the male androconia are clearly divided into three segments; in three the third segment is only partly disjunct; in the last there are only two distinct segments.

Parnara guttatus mangala Moore. D. A flourishing colony was found near a damp place in some rice fields. It is unlikely that this Oriental species managed to cross the Hindu Kush on its own; it is more likely to have come in a semi-circle via Herat.

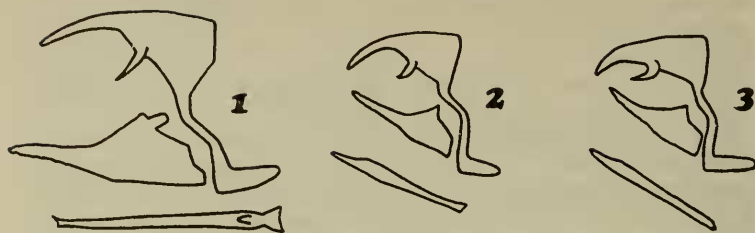


Figure 1. Genitalia of three Afghan species of *Hyponephele*; Paghman Mts., 15.vii.1977. 1. *H. davendra latistigma* Moore; 2. *H. undetermined*; 3. *H. tenuistigma* Moore (Scale 21:1).

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Postscript

Since the manuscript went to print I have discovered that the series of *Apharitis* from Doshi was *A. epargyros* rather than *acamas*, but this does not invalidate the comment on the individual variation.

Mr R. de Jong kindly informed me that he considers *Syrichthus plurimacula* to be specifically distinct from *Syrichthus staudingeri* and that in this sense my specimen is not *plurimacula*. It may be an extreme *S. s. staudingeri* or an undescribed subspecies of this butterfly.